

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference  CD005PCT	<b>FOR FURTHER ACTION</b> <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No.  PCT/JP 03/15641	International filing date (day/month/year)  05/12/2003	(Earliest) Priority Date (day/month/year)  05/12/2002
Applicant  CARDIO INCORPORATED		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 09 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☒ contained in the international application in written form.

☒ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

LAYERED BIORESORBABLE IMPLANT

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☒ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

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☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/15641

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61L27/50 A61L27/58 A61F2/06 A61F2/24

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61L A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/165601 A1 (CLERC CLAUDE O) 7 November 2002 (2002-11-07) paragraph '0014! paragraph '0026! - paragraph '0028! paragraph '0031! - paragraph '0032! paragraph '0034! paragraph '0049! claims 1-3,7,10	1-102
A	US 5 584 875 A (DUHAMEL RAYMOND C ET AL) 17 December 1996 (1996-12-17) column 1 - column 2 column 4, line 30 - line 37 column 5, line 22 - line 23 example 1 claim 6  ----- -/--	1-102

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

18 May 2004

Date of mailing of the international search report

14/06/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Hars, J

## INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 280 372 A (JOHNSON & JOHNSON MEDICAL) 1 February 1995 (1995-02-01) page 2 - page 5 claim 9 -----	1-102
A	EP 0 636 378 A (JOHNSON & JOHNSON MEDICAL) 1 February 1995 (1995-02-01) column 1, paragraph 1 column 3, line 42 - column 4, line 21 column 5, line 32 - line 55 column 7, paragraph 1 -----	1-102
A	EP 0 194 192 A (ETHNOR) 10 September 1986 (1986-09-10) page 5 page 7 - page 10 -----	1-102
A	US 5 741 257 A (KIRSCH AXEL) 21 April 1998 (1998-04-21) column 1, line 40 - column 2, line 16 column 3, line 4 - line 18 claims 1,3,4 -----	1-102
A	US 5 948 020 A (LEE SEUNG-JIN ET AL) 7 September 1999 (1999-09-07) column 2, line 31 - line 52 column 3, line 17 - line 55 -----	1-102
A	WO 01/32229 A (SMITH & NEPHEW ; COTTON NICHOLAS JOHN (GB)) 10 May 2001 (2001-05-10) page 1 page 20, line 20 - page 21 figures 1-4 -----	1-102
A	US 6 319 264 B1 (PAASIMAA SENJA ET AL) 20 November 2001 (2001-11-20) column 1, line 5 - line 6 column 1, line 47 - line 51 column 3, line 8 - column 4, line 38 -----	1-102
A	HEINO A ET AL: "Application of a self-reinforced polyglycolic acid (SR-PGA) membrane to the closure of an abdominal fascial defect in rats." JOURNAL OF BIOMEDICAL MATERIALS RESEARCH. 1999, vol. 48, no. 5, 1999, pages 596-601, XP002280760 ISSN: 0021-9304 abstract page 596, right-hand column, paragraph 3 -----	1-102
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## INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 943 298 A (COUSIN BIOTECH S A S) 22 September 1999 (1999-09-22) paragraph '0001! - paragraph '0004! paragraphs '0007!, '0008!, '0014! - '0018!, '21.26! claims 8,10	1-102
A	----- WO 93/17635 A (BARD INC C R) 16 September 1993 (1993-09-16) page 1, paragraph 2 page 6 - page 8	1-102
A	----- WO 95/25482 A (ORGANOGENESIS INC) 28 September 1995 (1995-09-28) the whole document	1-102
A	----- EP 1 023 879 A (MEDTRONIC INC) 2 August 2000 (2000-08-02) paragraphs '0001!, '0004! - '0006!, '0008!, '0013! - '0020! -----	1-102

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/JP 03/15641

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 1-102  
because they relate to subject matter not required to be searched by this Authority, namely:  
Although claims 40-50, 96-100 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.: 1-102  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Although claims 40-50,96-100 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

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Continuation of Box I.1

Claims Nos.: 1-102

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery

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Continuation of Box I.2

Claims Nos.: 1-102

Present claims 1-102 relate to an extremely large number of possible compounds/products/apparatus/methods. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds/products/apparatus/methods claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the compounds/products/apparatus/methods as disclosed in the examples:

An implant comprising:

- a first knit layer made of a biodegradable polymer
- a second woven layer made of a biodegradable polymer

Optional features:

- an intermediate biodegradable polymer layer
- a biomolecule attached to the first layer
- and all other technical features that appear in the claims and that are both founded by the description and clear

Further, a process for preparing the implant and a method of culturing the implant inside an non human organism for non therapeutical purposes.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP 03/15641

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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GB 2280372 A	01-02-1995	GB 2280850 A , B	15-02-1995
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		ES 2173107 T3	16-10-2002
		IN 183112 A1	11-09-1999
		JP 2875478 B2	31-03-1999
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Information on patent family members

International Application No

PCT/JP 03/15641

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